Amendments to the Claims

Claim 1 (Currently amended): A method of transmitting data, the method comprising:

receiving digital bits of data from a memory unit;

transforming a plurality of the bits of data into a single transmission pulse, the single transmission pulse having a pulse characteristic selected from a set of three or more predetermined pulse characteristics, one of which is corresponding to the plurality of bits of data; and

transmitting the single transmission pulse over a guided medium to a receiver without using a carrier signal to transmit the single transmission pulse;

wherein one set of the pulse characteristics correspond to the pulse duration and wherein length of the pulse duration corresponds to numbers 0 through 9.

Claim 2 (Cancelled)

Claim 3 (Original): The method of claim 1 wherein the data is in the form of universal character encoding.

Claim 4 (Currently amended): The method of claim 1 further comprising:

receiving the single transmission pulse from the guided medium at the receiver; and

transforming the single transmission pulse into the plurality of digital bits of data corresponding to the characteristics of the single transmission pulse.

Claims 5-20 (Cancelled)

Claim 21 (Currently amended): A method of transmitting data, comprising:

receiving at least two digital bits of data from a memory unit;

transforming the at least two digital bits of data into a single transmission pulse, the single transmission pulse having a pulse duration selected from a set of at least three predetermined pulse duration, one of which corresponds to the bits of data;

transmitting the single transmission pulse without using a carrier signal to transmit the transmission pulse.

Claim 22 (Previously presented): The method of claim 21 wherein the transmission pulse is a pulse of light and wherein the step of transmitting is transmitting over fiber optic cable.

Claim 23 (Previously presented): The method of claim 21 wherein the transmission pulse is an electronic pulse and wherein the step of transmitting is transmitting over a guided media.

Claim 24 (Cancelled).

Claim 25 (Previously presented): The method of claim 21 wherein the transmission pulse is a pulse of light and wherein the step of transmitting is transmitting over fiber optic cable.

Claims 26-37 (Cancelled).

Claim 38 (Currently amended): A method of transmitting data with electronic pulses, the method comprising:

receiving digital bits of data from a memory unit;

transforming a plurality of the bits of data into a single transmission pulse of electrical energy, the single transmission pulse having a pulse characteristic selected from a set of three or more predetermined pulse characteristics, one of which is corresponding to the bits of data; and

transmitting the transmission pulse over a transmission medium without using a carrier signal to transmit the transmission pulse.

Claim 39 (Previously presented): The method of claim 38 wherein the transmission pulse characteristics corresponding to the bits of data is the transmission pulses position in time.

Claim 40 (Previously presented): The method of claim 38 wherein the transmission pulse characteristics corresponding to the bits of data is the duration between transmission pulses.

Claim 41 (Previously presented): The method of claim 38 wherein the transmission pulse characteristics corresponding to the bits of data is the amplitude of the transmission pulse.

Claim 42 (Previously presented): The method of claim 38 wherein the transmission pulse characteristics corresponding to the bits of data is the duration of the transmission pulse.

Claim 43 (Cancelled).

Claim 44 (Cancelled).

Claim 45 (Previously presented): The method of claim 38 wherein the data is in the form of universal character encoding.

Claim 46 (Currently amended): The method of claim 38 further comprising:
receiving the single transmission pulse from the transmission medium; and
transforming the single transmission pulse into a plurality of digital bits of data corresponding to the specific characteristics of the transmission pulse.

Claim 47 (Currently amended): A method of transmitting data with electronic pulses, the method comprising:
receiving digital bits of data from a memory unit;
transforming a plurality of the bits of data into a single transmission pulse of electrical energy, the single transmission pulse having a pulse position selected from a set of three or more predetermined pulse positions, one of which is corresponding to the bits of data; and
transmitting the single transmission pulse over a transmission medium without using a carrier signal to transmit the single transmission pulse.

Claim 48 (Cancelled).

Claim 49 (Previously presented): The method of claim 47 wherein the data is in the form of universal character encoding.

Claim 50 (Currently amended): The method of claim 47 further comprising:
receiving the single transmission pulse from the transmission medium; and
transforming the single transmission pulse into a plurality of digital bits of data corresponding to the position of the transmission pulse.

Claims 51-57 (Cancelled)

Claim 58 (Currently amended): A method of transmitting data, the method comprising:
representing a symbol comprising at least two bits of data by varying a pulse characteristic of a single time modulated ultrawideband radio-frequency pulse wherein the pulse characteristic is selected to be of one of a set of at least three pulse characteristics based on the value of the at least two bits of data; ~~and~~
transmitting the time modulated ultrawideband pulse over a guided medium to a receiver.

Claim 59 (Previously presented): The method of claim 58 wherein each of the pulse characteristics within the set is a pulse duration.

Claim 60 (Previously presented): The method of claim 58 wherein each of the plurality of pulse characteristics within the set is a pulse position.

Claim 61 (Previously presented): The method of claim 58 wherein each of the plurality of pulse characteristics within the set is a pulse spacing.

Claim 62 (Currently amended): A method of transmitting data, comprising:

representing a symbol comprising a plurality of bits of data using a pulse characteristic of a single time modulated ultra ~~wide~~ wideband radio-frequency pulse;

transmitting the time modulated ~~ultrawideband~~ ultra wideband radio-frequency pulse.

Claim 63 (Currently amended): The method of claim 62 wherein the step of transmitting comprises transmitting the time modulated ultra wideband pulse over an electrically conductive ~~a~~ guided medium to a receiver.

Claim 64 (Previously presented): The method of claim 62 wherein the pulse characteristic is a pulse duration.

Claim 65 (Previously presented): The method of claim 62 wherein the step of representing comprises encoding the plurality of bits into a base 10 representation, whereas the single time modulated ultra wideband pulse corresponds to a digit between 0 and 9.

Claim 66 (Previously presented): The method of claim 62 wherein the step of representing comprises encoding the plurality of bits into a number base greater than base 2.